



Computer Tomography (CT) Safety During Pregnancy

Illness during pregnancy

If you become ill during pregnancy, both you and your unborn child become patients. However, prior to treatment, your doctor has to determine the medical issue and the possible conditions that could be affecting you and your baby.



Changes during pregnancy

As your body and metabolism change, sometimes a problem with the pregnancy or a separate disease in the abdomen can be difficult to distinguish. This is when medical imaging, or radiology, becomes useful.

Imaging exams are used to see inside the body and help determine if there is a medical issue. Computed tomography (CT) is a widely used imaging exam. CT uses x-ray radiation; therefore, it is recommended to use only when necessary. Your doctor may order a CT exam if you have symptoms that require treatment or exam results that need clarification but cannot wait until after the delivery of your baby.

Imaging without x-rays

In a pregnant patient, where both the baby and mother are being imaged, other imaging exams, such as ultrasound or magnetic resonance imaging (MRI), that do not involve x-rays are sometimes used.

However, when ultrasound or MRI does not provide the answers needed, or there is a time constraint, CT may be the best imaging option.

CT risks during pregnancy

If the abdomen or pelvis is not being imaged, such as in chest or head CT, then there is no risk to the baby.

If the CT scan includes the abdomen or pelvis, then there may be a slight risk to the baby. An unborn baby exposed to CT during pregnancy may have a one in 1,000 greater chance of developing a cancer as a child. Due to the amount of radiation used in normal CT imaging, this risk is not proven and may be nonexistent. The radiologist (a doctor with expertise in medical imaging) and the CT technologist can adjust the CT exam techniques to lower the radiation dose to your baby.

You should not refuse a CT exam necessary for diagnosing your potentially serious or urgent illness because of fear of radiation. Ultimately, the most important factor in having a healthy baby is ensuring a healthy mother, because the baby depends on the mother to stay well and carry her pregnancy to term.

The goal is to take care of the mother, who has a much greater chance of developing a serious illness, such as appendicitis.

Contrast material

For some CT exams, contrast material may need to be injected intravenously into an arm vein.

Contrast material does cross the placenta to your baby; however, it has been used in pregnancy for decades without harm.

CT during pregnancy

An illness is not pleasant, and a significant illness during pregnancy can be especially serious. However, the baby depends on the mother to stay healthy and to carry her pregnancy through. If helping the mother become better means performing a CT exam, then it will benefit the baby's health as well.

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